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# Visibility Index of Social Science Research: A Scientometric Dimension of Emerging Trends

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# Visibility Index of Social Science Research: A Scientometric Dimension of Emerging Trends

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## Abstract

*Visualizing into social science research, the present study examines the trend in social science research out put, degree of collaboration in research, extent of authors' productivity, growth pattern of literature and far-reaching productive regions at length. The central theme of the approach resultantly discovers and indicates the current research process and status at global scenario. Finally, the study shows the researchers participation in research and development, and research out put have set the pace vertically as determining a modern convenience of 21st century, causes encouragement to novice researchers. Summarizing the consequences of the study it is discovered that, single authorship is most dominant in 1st journal 'SSR', while in 2nd journal 'WSIF" the single authorship is dominated by multi authorship which signifies both journals are disconcerting one another in this context. Addressing the productivity of geographical regions the study investigates and explores that, USA with 86.8% papers is the top most productive country in 1st journal, whereas Australia having 27.8% in 2nd journal got 1st rank respectively among 11 and 20 participative countries of both journals. The study further reveals that, with the march of time the research out put has incorporated vigorous changes and has grown a highest up to 59.4 and 54.6 per cent papers under latest time zones as compared to other respective time zones at both journals. Besides, the study also denotes that, the principal productive institutions and prime productive authors of most productive countries hold prolific ranks in both the journals as compared to others.*

**Keywords:** Social Sciences; Scientometrics; Research out put; Authors productivity; Degree of collaboration; Authorship pattern; Citation pattern; Productive countries and Institutions; Prolific Authors.

Bibliometrics, Scientometrics, Citation Study, and Content analysis are the concepts supplementary and complementary to each other in their respective applications in the domain of research which are most popular tools extensively used in the field of Library and Information Science. This technique has been applied in the present study to evaluate Social Sciences research productivity at a global context for obtaining necessary inferences.

To avoid confusion, it would be worthwhile to point out here that, though the data undertaken from papers indexed in Science Direct Bibliographic Database covers the period 2006-2010, but the chronological Classification of said papers, as indicated in different tables of this paper, varies from it because, the papers which have been assimilated for this study are indexed in the database from 2006-2010 hottest papers which have been published in the 1st journal (SSR) within the period 2002-2011 and in 2nd journal (WSIF) covering the period 1995-2010. Hence, the chronological classification of papers is made on the basis of the actual year of their publications in the concerned journals.

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## 1. Introduction

The social sciences are more urgently needed, of higher potential societal relevance and more crucial to humankind's possibilities of coming to terms with its global interconnectedness in both economic, cultural, and resource terms, than ever before. The new global context cannot be made intelligible without the contributions of the social sciences. Conversely this context offers immense possibilities for advancement and conceptual innovation of the social sciences and the humanities but also for empirical probing and testing on a vastly expanded scale. Yet, these potentials are unlikely to be realized unless institutional initiatives are taken on a transnational scale. Thus, there are urgent needs for vital research capacities and environments to allow humankind to grasp and master current global transformations in the context of the rise of new economic, cultural and scientific centres but also of a landscape where deep knowledge divides persist, (*Wittrock; 2010).*

At the beginning of the twenty-first century, social sciences are taught in most, if not all universities. The number of social science students, lecturers, professors and researchers has increased rapidly, as has the number of books and articles produced in different languages. As a result of this production, a large number of social scientists work not only as scholars and researchers, but also as experts in national public administrations; they advise their governments and sometimes steer the development of their economies. Advances in information technology allow social scientists to communicate more often and more quickly, among themselves as well as with civil society. In the first decade of the twenty-first century, social sciences expertise remains in high demand from policy-makers, media and the public. Social scientists have knowledge and skills that are needed to identify, analyze and decipher structures and changes in society, as well as the seeds of future change. Much is expected from social sciences knowledge and expertise when seeking to solve challenges such as, to name just a few, poverty, climate change and the food crisis, (*Caillods* and *Jeanpierre; 2010).*

Europe and North America far outweigh the rest of the world in terms of academic publications. Hence, using the Ulrich Database of Journals or the WoS shows that, Europe accounts for about 45% of the world journal production and for about 38% of papers, whereas North America follows just behind with an average of 37% of journals, but 52% of papers, (Narvaez-Berthelemot and Russel, 2001). A first insight into the social sciences' global evolution over the last decades can be obtained from the number of research articles written by authors from each region during the two decades 1988-1997 and 1998-2007. According to the SSCI11, the data show a substantial increase of about 21% in the numbers of social sciences articles during the two periods: from 187,109 published between 1988 and 1997 to 226,940 published between 1998 and 2007. As shown the growth varies greatly from region to region, with the largest in Latin America (an increase of 74%), Europe (increasing by 58.4%) and Asia (a rise of 56.7%). The growth is only about 30% for Africa and

Oceania, while the CIS is the only group of countries facing a decline in the production of social sciences papers (-4.6%). The latter reflects the disorganization that followed the fall of USSR (Wilson and Markusova, 2004). Part of the overall growth is also the result of the SSCI database's changing content, which, over the years, has covered European journals more. The relative stability of North American growth (of only 3.8%) suggests that their system has attained a plateau, whereas a region like Asia is still building its social science research system as cited by (*Gingras and Mosbah-Natanson; 2010)*.

It is well known that, Africa's share of world science as measured in papers published in ISI-indexes have been declining steadily over the past decades. Tijssen shows as to how sub-Saharan Africa has fallen behind in its share of world science production quite dramatically from 1% in 1987 to 0.7% in 1996 with no sign of recovery. These diminishing shares of African science overall do not reflect a decrease in an absolute sense, but rather an increase in publication output less than the worldwide growth rate. Africa has lost 11% of its share in global science since its peak in 1987; sub-Saharan science has lost almost a third (31%). The countries in Northern Africa; Egypt and the Maghreb countries (Algeria, Mauritania, Libya, Morocco and Tunisia) accounted for the modest growth of the African share of the worldwide output during the years 1998-2002 as cited by (*Mouton; 2010).*

Social Science R&D funding in South Asia is quite marginal compared to that for the science and technology fields. In India, social science R&D funding is a mere 8% of that of science and technology in recent years. The **11th** Five Year Plan (2007-2012) is committed to increasing the education budget by four times that of the 10th Plan, but it is still too early to assess the effects of this commitment on social science research. In the South Asian region as a whole, the social sciences occupy the lowest place in terms of status and career opportunities in the hierarchy of disciplines. The social sciences are not thought to be as productive and lucrative as marketing, business and administration (*Krishna and Krishna; 2010).*

## 2. Scope and Objective of the Study

The scope of the study limited to two international journals viz., "*Social Science Research (SSR)"* and *"Women's Studies International Forum (WSIF)"* cited at Science Direct Database Top 25 Hottest Articles during the period 2006-2010 in the field of Social Sciences. The study included a total of 1000 articles adding 500 hundred from each journal. The specific objectives of the present study are to determine the following key issues:

i. Nature of Authorship pattern in Social Sciences;
ii. Single Vs Multiple authored papers;
iii. Geographical Distribution of publications;
iv. Growth pattern of literature;
v. Most productive authors of top countries;
vi. Degree of collaboration of authors;

vii. Degree of citation of articles; and
viii. Study of length of the papers.

## 3. Methodology Employed

Data on papers published in two journals such as "*Social Science Research (SSR)"* and *"Women's Studies International Forum (WSIF)"* were collected from each downloaded articles from Science Direct on-line Database and each data examined identically. All papers included in the analysis are duly indexed under top twenty five hottest papers from 2006-2010. Each item of information was then processed by developing a database of 1000 down loaded records (500 from each journal) adding essential fields viz. journal title, article title, 1st author, number of authors, affiliation with institutions, country of origin (considering 1st author), year of publication, number of citations, length of papers and ranking pattern, etc. using the MS-Excel spread sheet. Since, the reference counts are not freely available with the abstract site, the investigator did not able to analyze reference pattern of the papers. Finally, all relevant data are sorted, tabulated, and assimilated in their logical order so as to draw necessary inferences for the present research.

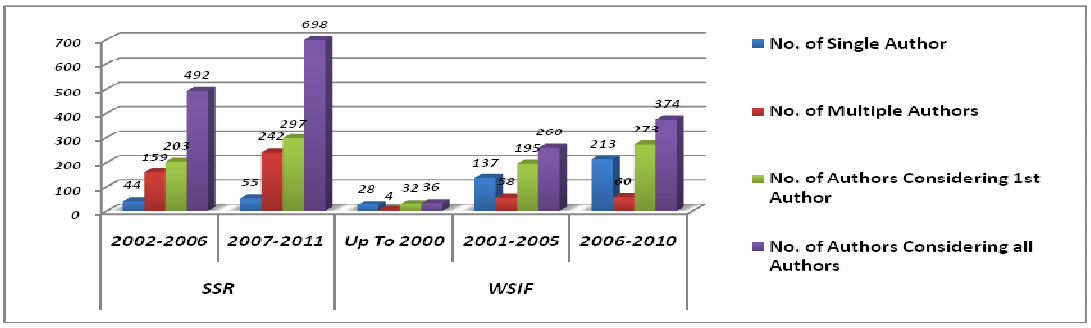
## 4. Data Analysis

*To measure the extent of degree of collaborativeness in a research is a most prominent area in the bibliometric study which examines and elucidates the trend of authorship pattern in a specific field is focused through the present study as shown in table 4.1 given below.*

**Table-4.1: Authorship pattern and Degree of Collaboration**

| | **1. Social Science Research (SSR)** | | | | | | | | **2. Women's Studies International Forum (WSIF)** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Authorship Pattern of Papers'** | | | | | | | | **Authorship Pattern of Papers'** | | | | | | | |
| ***Year*** | **No. of Single Author** | **No. of Multiple Authors** | **No. of Authors Considering 1st Author** | **No. of Authors Considering all Authors** | **No. of Papers** | **Degree of Collaboration** | ***Avg Papers per Author*** | ***Year*** | **No. of Single Author** | **No. of Multiple Authors** | **No. of Authors Considering 1st Author** | **No. of Authors Considering all Authors** | **No. of Papers** | **Degree of Collaboration** | ***Avg Papers per Author*** |
| ***2002-2006*** | **44** | **159** | **203** | **492** | **203** | ***0.78*** | ***0.41*** | **Up To 2000** | **28** | **04** | **32** | **36** | **32** | ***0.12*** | ***0.88*** |
| ***2007-2011*** | **55** | **242** | **297** | **698** | **297** | ***0.81*** | ***0.42*** | **2001-2005** | **137** | **58** | **195** | **260** | **195** | ***0.29*** | ***0.75*** |
| **Total** | **99** | **401** | **500** | **1190** | **500** | ***0.80*** | ***0.42*** | **2006-2010** | **213** | **60** | **273** | **374** | **273** | ***0.21*** | ***0.72*** |
| | | | | | | | | **Total** | **378** | **122** | **500** | **670** | **500** | ***0.24*** | ***0.74*** |

**Figure-1: Authorship pattern of Papers of the Journal (*SSR*) and (*WSIF*)**




The extent of collaboration in research can be measured with the help of multi authored papers using the formula given by *Subramanyam (1982).*

Degree of Collaboration C= Nm/Nm+Ns

C= Degree of Collaboration

Nm= Number of Multiple Authors

Ns= Number of Single Authors

The *table 4.1* demonstrated the authorship trend and degree of collaboration of research papers. All published papers of 1st journal "SSR" are broadly grouped under two time zones such as 2002-2006 and 2007-2011 and in 2nd journal "WSIF" is distributed in three periodic zones up to 2000, 2001-2005, and 2006-2010 respectively. It is noticed that, there are 203 authors considering 1st author and 492 authors considering all authors in 1st zone, while 297 authors found considering 1st author and 698 considering all authors involved in publication in 2nd zone of 1st journal. Hence, later zone is proved proficient having participation of more number of authors in publication of papers although later zone holds more number of papers. The authors' collaboration trend of 1st journal, therefore, indicates multiple authors are dominating over single which signifies research is a collaborative work rather than individual.

In case of 2nd journal "WSIF", the degree of collaboration shows the reverse trend to the 1st journal and resolves that, research is an individual activity rather than collaboration.

Addressing both the journals it is also estimated that, the number of authors at each latter zone are larger than earlier zones promulgates that, involvement of authors in research publication is growing at a tremendous rate. Hence, it may be concluded that, the number of authors are increasing which means research activity is expanding and becoming more popular day by day.

*Distribution of research out put by geographical regions predominantly proves the strength or weakness assigning ranks to the productive countries on the basis of the publication of research literature of their researchers/scholars in a particular journal or produced under a discipline(s) which is demonstrated clearly in table 4.2.*

## Table-4.2: Country-wise Distribution of Literature

| Rank | 1. Social Science Research (SSR) | | | Rank | 2. Women's Studies International Forum (WSIF) | | |
|---|---|---|---|---|---|---|---|
| | Country | Literature Production | % | | Country | Literature Production | % |
| 1 | USA | 434 | 86.8 | 1 | Australia | 139 | 27.8 |
| 2 | Canada | 08 | 1.6 | 2 | UK | 133 | 26.6 |
| 2 | The Netherlands | 08 | 1.6 | 3 | USA | 102 | 20.4 |
| 3 | Norway | 06 | 1.2 | 4 | Canada | 59 | 11.8 |
| 4 | Israel | 05 | 1 | 5 | Malaysia | 17 | 3.4 |
| 5 | Belgium | 04 | 0.8 | 6 | New Zealand | 13 | 2.6 |
| 6 | Denmark | 03 | 0.6 | 7 | Fiji | 09 | 1.8 |
| 6 | Sweden | 03 | 0.6 | 8 | Ireland | 05 | 1 |
| 7 | Turkey | 02 | 0.4 | 9 | Sri Lanka | 03 | 0.6 |
| 8 | China | 01 | 0.2 | 9 | Sweden | 03 | 0.6 |
| 8 | UK | 01 | 0.2 | 10 | Bangladesh | 02 | 0.4 |
| Others | | 25 | 5 | 10 | Israel | 02 | 0.4 |
| Total (Rank-8 and 11 Countries) | | 500 | 100 | 10 | Nigeria | 02 | 0.4 |
| * | | * | | 10 | Singapore | 02 | 0.4 |
| * | | * | | 10 | South Korea | 02 | 0.4 |
| * | | * | | 10 | Spain | 02 | 0.4 |
| * | | * | | 11 | China | 01 | 0.2 |
| | | | | 11 | Germany | 01 | 0.2 |
| * | | * | | 11 | Korea | 01 | 0.2 |
| * | | * | | 11 | Turkey | 01 | 0.2 |
| * | | * | | Others | | 01 | 0.2 |
| * | | * | | Total (Rank-11 and 20 Countries) | | 500 | 100 |

At a look towards the geographical distribution of literature of both journals "*SSR*" and "*WSIF*", the *table 4.2* depicts that, the authors from 11 and 20 countries have shown their interest vigorously for publishing literature with both journals. USA is proved to be most productive country with 434 (86.8 per cent) papers in 1st journal, where as Australia is 1st in latter journal having 139

(27.8 per cent) literature. Analyzing the contribution of remaining 10 countries of 1st journal the result shows that, only a meager 66 (12.2 per cent) research literature are produced by the authors of 10 countries which is 6.6 on an average per country. In reverse, at the 2nd journal there are 2 other prominent countries other than Australia such as 'UK' 133 (26.6) and 'USA' 102 (20.4) have more or less equidistant contribution as well. Moreover, the remaining 17 countries have their share 25 per cent respectively which may be, on an average constitute 7.41 papers per country.

It may be concluded here that, 'USA' is the most dominant contributor in 1st journal, while 'Australia', 'UK' and 'USA' prominent over other countries in 2nd journal.

*Usually research papers are ranked considering the number of times downloads and cited those papers by users within a particular period of time. The papers considered for the present study are accordingly ranked by the Science Direct itself. Specifically, the table 4.3 denotes the ranking pattern of papers of Top Ten productive countries of the journal 'CPCS' and 'ES' so far.*

**Table-4.3: Ranking Pattern of Papers of Top Ten Geographical Regions**

| **1. Social Science Research (SSR)** | | | | | | | | | **2. Women's Studies International Forum (WSIF)** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Rank** | **Name of Country** | **Scattering of Papers under specified Rank** | | | | | | | **Rank** | **Name of Country** | **Scattering of Papers under Specified Rank** | | | | | | |
| | | **R1-5** | **R 6-10** | **R11-15** | **R16-20** | **R21-25** | **Total Number of Papers** | **%** | | | **R1-5** | **R 6-10** | **R11-15** | **R16-20** | **R21-25** | **Total Number of Papers** | **%** |
| *1* | **USA** | **91 (20.96)** | **83** | **84** | **87** | **89** | **434** | **86.8** | *1* | ***Australia*** | **25 (17.98)** | **26** | **23** | **27** | **38** | **139** | **27.8** |
| *2* | **Canada** | **02** | **02** | **02** | **01** | **01** | **08** | **1.6** | *2* | ***UK*** | **20 (15.03)** | **25** | **27** | **33** | **28** | **133** | **26.6** |
| *2* | **The Netherlands** | **0** | **02** | **02** | **02** | **02** | **08** | **1.6** | *3* | ***USA*** | **42 (41.17)** | **08** | **22** | **18** | **12** | **102** | **20.4** |
| *3* | **Norway** | **01** | **01** | **03** | **0** | **01** | **06** | **1.2** | *4* | ***Canada*** | **07** | **26** | **10** | **11** | **05** | **59** | **11.8** |
| *4* | **Israel** | **01** | **01** | **03** | **0** | **0** | **05** | **1** | *5* | ***Malaysia*** | **03** | **04** | **04** | **04** | **02** | **17** | **3.4** |
| *5* | **Belgium** | **0** | **02** | **0** | **02** | **0** | **04** | **0.8** | *6* | ***New Zealand*** | **02** | **01** | **05** | **01** | **04** | **13** | **2.6** |
| *6* | **Denmark** | **0** | **0** | **01** | **01** | **01** | **03** | **0.6** | *7* | ***Fiji*** | **0** | **05** | **0** | **01** | **03** | **09** | **1.8** |
| *6* | **Sweden** | **0** | **02** | **0** | **01** | **0** | **03** | **0.6** | *8* | ***Ireland*** | **0** | **02** | **01** | **0** | **02** | **05** | **1** |
| *7* | **Turkey** | **0** | **01** | **0** | **01** | **0** | **02** | **0.4** | *9* | ***Sri*** | **0** | **01** | **01** | **0** | **01** | **03** | **0.6** |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | ***Lanka*** | | | | | | | |
| ***8*** | **China** | **0** | **01** | **0** | **0** | **0** | **01** | **0.2** | ***9*** | ***Sweden*** | **01** | **0** | **01** | **01** | **0** | **03** | **0.6** |
| ***8*** | **Other (1) Country** | **0** | **0** | **0** | **0** | **01** | **01** | **0.2** | **Other (10) Countries** | | **0** | **02** | **05** | **05** | **04** | **16** | **3.2** |
| **No Information on Country of origin** | | **05** | **05** | **05** | **05** | **05** | **25** | **5** | **No Information on Country of origin** | | **0** | **0** | **0** | **0** | **01** | **01** | **0.2** |
| **Total** | | **100** | **100** | **100** | **100** | **100** | **500** | **100** | **Total** | | **100** | **100** | **99** | **101** | **100** | **500** | |

For the present study the authors have downloaded all the papers 500 each of the journal 'Social Science Research (SSR)' and 'Women's Studies International Forum (WSIF)' from the year 2006-2010 indexed and ranked under Science Direct Database top 25 hottest papers. In the earlier journal 'USA' deserves prominent position having 86.8 per cent papers published and pride with largest number of top ranking papers 91 (20.96 per cent) over other countries. On the other hand in later journal 'Australia' is the leading country with 139 (27.8) papers, followed by 'UK', 'USA' as 2nd and 3rd rank publishing 133 (26.6), 102 (20.4) papers with the journal 'WSIF'. But, it is note worthy to mention here that, USA is producer of the largest top ranking papers 42 (41.17 per cent) among all other productive countries in 1st journal, although rank of USA is 3rd in 2nd journal, while the leading country Australia stood 2nd rank with top ranking papers 25 (17.98 per cent) and UK 3rd rank with 20 (15.03 per cent) papers publishing in 2nd journal as well.

It may, therefore, be concluded here that, a most productive country may produce large number of top ranking papers like 'USA' as in 1st journal, but always it is not true as in case of 2nd journal 'Australia' being most productive country got 2nd rank in producing top ranking papers.

*Anticipating authors' productivity using Lotka's inverse square law of scientific productivity has been immensely used in bibliometric mapping of research out put so as to find out expected authors per paper(s) taking into account the number of authors observed per paper(s) is stated below in table 4.4.*

**Table-4.4: Number of expected Authors derived with the value of α=2 using Lotka's inverse Square Law of Scientific Productivity**

| No. of Papers | 1. Social Science Research (SSR) | | | | No. of Papers | 2. Women's Studies International Forum (WSIF) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Considering 1st Auth. (unique) | | Considering all Authors | | | Considering 1st Auth. (unique) | | Considering all Authors | |
| | No. of Auth.s Observed | No. of Auth.s Expected | No. of Auth.s Observed | No. of Auth.s Expected | | No. of Auth.s Observed | No. of Auth.s Expected | No. of Auth.s Observed | No. of Auth.s Expected |
| 1 | 77 | 77 | 162 | 162 | 1 | 40 | 40 | 50 | 50 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **2** | **34** | **19** | **135** | **41** | **2** | **20** | **10** | **54** | **13** |
| **3** | **18** | **09** | **106** | **18** | **3** | **13** | **04** | **51** | **06** |
| **4** | **12** | **05** | **92** | **10** | **4** | **09** | **03** | **48** | **03** |
| **5** | **07** | **03** | **103** | **06** | **5** | **04** | **02** | **25** | **02** |
| **6** | **04** | **02** | **60** | **05** | **6** | **02** | **01** | **18** | **01** |
| **7** | **03** | **02** | **87** | **03** | **7** | * | * | * | * |
| **8** | **04** | **01** | **80** | **03** | **8** | **02** | * | **16** | * |
| **9** | * | * | * | **02** | **9** | **02** | * | **20** | * |
| **10** | **02** | * | **50** | **02** | **10** | **02** | * | **30** | * |
| **11** | **02** | * | **66** | **01** | **11** | * | * | * | * |
| **12** | * | * | * | * | **12** | **01** | * | **24** | * |
| **13** | **02** | * | **65** | * | **13** | * | * | * | * |
| **14** | * | * | * | * | **14** | **03** | * | **56** | * |
| **15** | **01** | * | **25** | * | **15** | * | * | * | * |
| **16** | **01** | * | **48** | * | **16** | **02** | * | **48** | * |
| **17** | * | * | * | * | **17** | **04** | * | **68** | * |
| **18** | **01** | * | **36** | * | **18** | **01** | * | **18** | * |
| **19** | * | * | * | * | **19** | **01** | * | **76** | * |
| **20** | * | * | * | * | **20** | **01** | * | **20** | * |
| **21** | * | * | * | * | **21** | * | * | * | * |
| **22** | * | * | * | * | **22** | **01** | * | **22** | * |
| **23** | * | * | * | * | **23** | * | * | * | * |
| **24** | **01** | * | **75** | * | **24** | * | * | * | * |
| **25** | * | * | * | * | **25** | * | * | * | * |
| **26** | * | * | * | * | **26** | **01** | * | **26** | * |
| **Total** | **169** | * | **1190** | * | **Total** | **109** | * | **670** | * |

Lotka's Law describes the frequency of publication by authors in any given field. It states that the number of authors making $n$ contributions is about $1 / n^a$ of those making one contribution, where $a$ nearly always equals two. More plainly, the number of authors publishing a certain number of articles is a fixed ratio to the number of authors publishing a single article. As the number of articles published increases, authors producing those publications become less frequent. There are 1/4 as many authors publishing two articles within a specified time period as there are single-publication authors, 1/9 as many publishing three articles, 1/16 as many publishing four articles, etc. Though the law itself covers many disciplines, the actual ratios involved (as a function of 'a') are very discipline-specific. The general formula says:

$X^nY = C$ or $Y = C/X^n$,

Where $X$ is the number of publications, $Y$ the relative frequency of authors with $X$ publications, and $n$ and $C$ are constants depending on the specific field $n \approx 2$.

For the present study N≈2 and C≈77 and 162 in 1st journal, while C≈40 and 50 in 2nd journal respectively.

The table 4 defines the author productivity considering 1st author as well as all contributors which proclaim that, in the 1st journal *'SSR'* 77 and 162 authors have single paper each. Going to test, to what extent the authors' productivity justifies to Lotka's Law the study devised expected authors frequency against relative productivity frequency and claims that, the expected authors frequency should be 77, 19, 9, 5, 3 for papers each 1-5 and 6, 7 number papers should be produced by 2 authors each and only one author may produce 8 papers at large considering observed 1st authors frequency, but in account of all observed authors frequency the expected authors frequency may be 162, 41, 18, 10, 6 and 5 against relevant expected papers 1, 2, 3, 4, 5 and 6, where as 7, 8 papers may produce 3 authors each, 9, 10 papers may publish 2 authors each and 11 papers would be produced by 1 author only as per Lotka's principle.

As far as 2nd journal '*WSIF* is concerned, the number of authors observed (40, 50) are producing single paper each. Therefore, expected authors frequency would be 40, 10, 4, 3, 2, and 1 who can produce 1, 2, 3,4 5, 6 number of papers (considering 1st author only), while in consideration of all authors the expected authors frequency could be 50, 13, 6, 3, 2, and 1 respectively who must produce 1, 2, 3, 4, 5, and 6 number of papers.

From this observation it can safely be concluded that, the author contribution pattern of both journals is far from Lotka's Law of Inverse Square or mismatch the Lotka's pattern, because observed frequency of papers and authors disconcerts with the expected frequency.

*The study of growth pattern of literature induces a clear picture of productivity trend towards positive or negative directions as well as their degree extensiveness under different time zones as depicts the table 4.5 below.*

**Table-4.5: Growth Pattern of Literature**

| 1. Social Science Research (SSR) | | | | 2. Women's Studies International Forum (WSIF) | | |
|---|---|---|---|---|---|---|
| **Sl. No.** | **Year** | **Number of Papers** | **Growth Rate** | **Year** | **Number of Papers** | **Growth Rate** |
| **1** | ***2002-2006*** | **203 (40.6)** | **203 (40.6)** | **Up To 2000** | **32 (6.4)** | **32 (6.4)** |
| **2** | ***2007-2011*** | **297 (59.4)** | **46.30** | **2001-2005** | **195 (39)** | **509.37** |
| **Total** | | **500** | * | **2006-2010** | **273 (54.6)** | **40** |
| | | | | **Total** | **500** | * |

The trend of literature growth is stressed though the present study and measured in order to envisage the growing pattern of literature chronologically in the area of Social Sciences. The present study experiences that, in the 1st journal 'SSR' there are two time zones such as: 2002-2006 and

2007-2011 among which 500 papers are distributed where the 1st zone carries 203 papers, while 2nd zone carried the remaining 297 papers. The growth rate from 1st zone to 2nd zone is found 46.30 per cent. In the same way, the literature output of 2nd journal 'WSIF'are also grouped under 3 period zones and the data drawn shows the positive trend in literature production. At the 1st zone, there were only 32 papers, where as the 2nd zone acquires 195 papers which is 509.37 percent higher than earlier one, followed by the third zone carries 40 per cent higher than the 2nd zone as asserts the *table 4.5.*

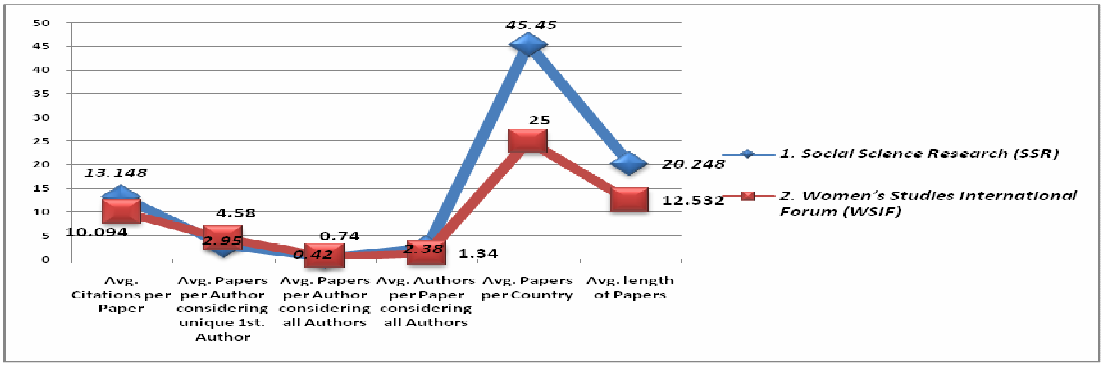
As a whole, it may be seen that, both the journals literature growth are observed ascension in nature. More over, it is clear that, the 2nd zone of 1st journal and 3rd zone of 2nd journal are expressed proficient having large number of out put compared to other related zones. There is another prime vision in 2nd journal 2nd zone which accounts a significant growth in literature than other zones in both the journals.

*For a comparative examination of the degree of quality of papers of both journals such as: 'CPCS' and 'ES', an average estimation from different relevant angles is emphatically and logically outlined in table 4.6 for a better understanding and a closer perception into over all results of the study.*

**Table-4.6: Average Calculation**

| Sl. No. | Factors | 1. Social Science Research (SSR) | 2. Women's Studies International Forum (WSIF) |
|---|---|---|---|
| 1 | Avg. Citations per Paper | 13.148 | 10.094 |
| 2 | Avg. Papers per Author considering unique 1st. Author | 2.95 | 4.58 |
| 3 | Avg. Papers per Author considering all Authors | 0.42 | 0.74 |
| 4 | Avg. Authors per Paper considering all Authors | 2.38 | 1.34 |
| 5 | Avg. Papers per Country | 45.45 | 25 |
| 6 | Avg. length of Papers | 20.248 | 12.532 |

**Figure-2: Average Factors of both Journals "1 (*SSR)*" and "2 (*WSIF)*" Output**



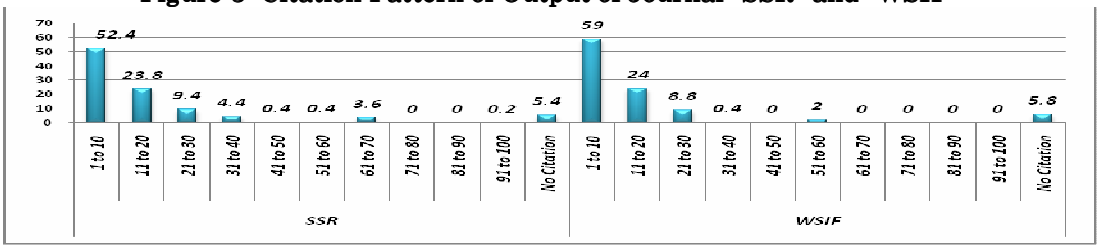
Applying statics 'Mean' the *table 4.6* significantly depicts average citations per paper, average citations per author, average authors per paper, average citations per country and average pages per paper etc. The out comes of the present table indicates that, there is lack of uniqueness/uniformity in results of both the journals. However, the study proves that, the 1nd journal papers are more popular among the users, because the papers are highly cited. Accounting the authors participation in literature production, 1st journal is determined to have large number of authors which signifies less average papers per author than the counterpart. Further more, average authors per paper, average citations per country and average length of papers in 1st journal is undoubtedly wider and vigorously settled upward than 2st journal as far.

*Counting of citations discovers the strength or weakness of papers as well the researchers/authors are inevitable branch of a bibliometric study which has been emphatically presented in table 4.7 for the present piece of research.*

**Table-4.7: Frequency of Citation of Whole Publication**

| 1. Social Science Research (SSR) | | | 2. Women's Studies International Forum (WSIF) | | | Total |
|---|---|---|---|---|---|---|
| Number of Citations | Number of Papers | Average | Number of Citations | Number of Papers | Average | |
| 01-10 | 262 (52.4) | 5.465 | 01-10 | 295 (59) | 4.786 | 557 (55.7) |
| 11-20 | 119 (23.8) | 14.621 | 11-20 | 120 (24) | 15.933 | 239 (23.9) |
| 21-30 | 47 (9.4) | 25.468 | 21-30 | 44 (8.8) | 25.295 | 91 (9.1) |
| 31-40 | 22 (4.4) | 33.045 | 31-40 | 02 (0.4) | 40 | 24 (2.4) |
| 41-50 | 02 (0.4) | 44 | 41-50 | 0 | 0 | 02 (0.2) |
| 51-60 | 02 (0.4) | 55 | 51-60 | 10 (2) | 53 | 12 (1.2) |
| 61-70 | 18 (3.6) | 66 | 61-70 | * | * | 18 (1.8) |
| 71-80 | * | * | 71-80 | * | * | * |
| 81-90 | * | * | 81-90 | * | * | * |
| 91-100 | 01 (0.2) | * | 91-100 | * | * | 01 (0.1) |
| No Citation | 27 (5.4) | * | No Citation | 29 (5.8) | 0 | 56 (5.6) |
| Total | 500 | * | Total | 500 | * | 1000 |

**Figure-3: Citation Pattern of Output of Journal "SSR" and "WSIF"**



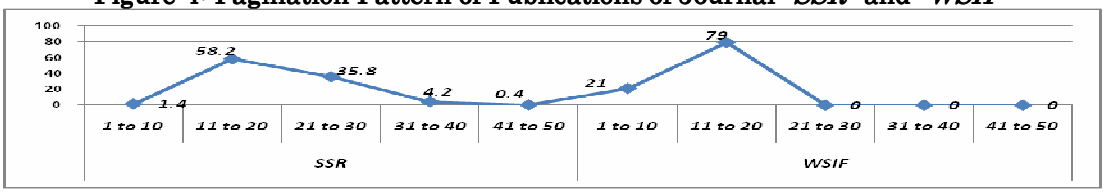
Citation count of research papers provides a definite rank and determines its usability for the researchers and scholars. The *table 4.7* advocates the citation pattern of papers of both the journals. As data promulgates that, citation pattern of both the journals are unlikely scattered. In the 1st journal citations are scored up to 100, whereas in 2nd journal, citations of papers are spread up to 60. In both the journals it is seen that a large number of papers 262 (52.4) and 295 (59) are cited up to 10 times, followed by 119 (23.8) as well as 120 (24) cited 10-20 times respectively. In 1st journal, only 01 (0.2) paper is cited up to 100 times, which pattern lacks the 2nd journal papers. Additionally, it is also observed that, non-cited papers in 2nd journal are more than the papers of 1st one. As a result it may be concluded that, the papers of 1st journal are more accessed and used by the scholars compared to the 2nd journal.

*As the present study undertakes a bibliometric mapping of papers of journals 'CPCS' and 'ES', the analysis of pagination pattern of papers of an individual journal and at a comparative measurement of both journal papers holds a prominent role which is addressed significantly in table 4.8 so far.*

**Table-4.8: Pagination Pattern of Papers**

| 1. Social Science Research (SSR) | | | 2. Women's Studies International Forum (WSIF) | | | Total |
|---|---|---|---|---|---|---|
| Length of Papers | Number of Papers | Average | Length of Papers | Number of Papers | Average | |
| 1-10 | 07 (1.4) | 9.714 | 1-10 | 105 (21) | 8.8 | 112 (11.2) |
| 11-20 | 291 (58.2) | 16.463 | 11-20 | 395 (79) | 13.524 | 686 (68.6) |
| 21-30 | 179 (35.8) | 24.798 | 21-30 | 0 | 0 | 179 (17.9) |
| 31-40 | 21 (4.2) | 35.333 | 31-40 | 0 | 0 | 21 (2.1) |
| 41-50 | 02 (0.4) | 42 | 41-50 | 0 | 0 | 02 (0.2) |
| Total | 500 | * | Total | 500 | * | 1000 |

**Figure-4: Pagination Pattern of Publications of Journal "*SSR*" and "*WSIF*"**




Usually, the pagination pattern of the papers published in various research journals are diverse in nature which is highlighted in *table 4.8*. The above table intensively focused over the issue considering both the journal papers such as 'SSR' and 'WSIF" identically for the present research. As far as the 1st journal is concerned, the lengths of the papers are larger than the 2nd journals papers'. The major number of papers i.e. 291 (58.2%) of the 1st journal limiting the pages between 11-20,

whereas the 2nd journal found to have the same pagination pattern with the highest of 395 (79%) papers and the 2nd largest number of papers 179 (35.82%) of 1nd journal have the pages between 21-30, while in 2nd journal 105 (21%) papers follow the pattern of pagination up to 10. Moreover, it is observed that, papers having 31-40 pages account only 21 (4.2%), 1-10 pages assimilate 7 (1.4%) papers and papers having above forty pages constitute 2 (0.4%) only a meager quantity with 1st journal, while in contrast the 2nd journal have no papers with pagination pattern beyond 20, the study reveals. In conclusion one may safely ascertain that, the 1st journal is more preferable and encouraging for the authors providing a wider choice and scope in page limitation of papers.

*Affiliation of authors with institutions brings a pride of place while authors/researchers found most prolific as regards to their research out put. However, the table 4.9 bears a prime vision on most productive institutions as shown below.*

**Table-4.9: Top 10 Most Productive Institutions**

| **1. Social Science Research (SSR)** | | | | | | | | **2. Women's Studies International Forum (WSIF)** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Country Rank** | **Country** | **Total no. of Papers** | **No. of Institutions involved** | **Average Institutional Output** | **Most Productive Institution** | **No. of Papers** | **Institution Rank** | **Country Rank** | **Country** | **Total no. of Papers** | **No. of Institutions involved** | **Average Institutional Output** | **Most Productive Institution** | **No. of Papers** | **Institution Rank** |
| **1** | ***USA*** | **434** | **75** | ***5.78*** | ***Bowling Green University*** | **48** | ***1*** | ***1*** | ***Australia*** | **139** | **17** | ***8.17*** | ***York University*** | **36** | **1** |
| **2** | ***Canada*** | **08** | **03** | ***2.66*** | ***Statistics Canada*** | **04** | ***4*** | ***2*** | ***UK*** | **133** | **31** | ***4.29*** | ***Universiti Kebangsaan*** | **17** | **4** |
| **2** | ***The Netherlands*** | **08** | **03** | ***2.66*** | ***Tilburg University*** | **05** | ***3*** | ***3*** | ***USA*** | **102** | **24** | ***4.25*** | ***Loughborough University*** | **31** | **3** |
| **3** | ***Norway*** | **06** | **01** | ***6*** | ***Norwegian University of Science and Technology*** | **06** | ***2*** | ***4*** | ***Canada*** | **59** | **07** | ***8.42*** | ***University of Melbourne*** | **35** | **2** |
| **4** | ***Israel*** | **05** | **01** | ***5*** | ***Tel Aviv*** | **05** | ***3*** | ***5*** | ***Malaysi*** | **17** | **05** | ***3.4*** | ***University of*** | **08** | **5** |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ***University*** | | | | ***a*** | | | | ***California*** | | |
| **5** | ***Belgium*** | **04** | **01** | ***4*** | ***University of Leuven*** | **04** | ***4*** | ***6*** | ***New Zealand*** | **13** | **03** | ***4.33*** | ***University of Bradford*** | **06** | **6** |
| **6** | ***Denmark*** | **03** | **01** | ***3*** | ***The Danish National Institute of Social Research*** | **03** | ***5*** | ***7*** | ***Fiji*** | **09** | **02** | ***4.5*** | ***University of Massachusetts*** | **06** | **6** |
| **6** | ***Sweden*** | **03** | **02** | ***1.5*** | ***Malmö University*** | **02** | ***6*** | ***8*** | ***Ireland*** | **05** | **02** | ***2.5*** | ***University of Kelaniya*** | **03 (60)** | **7** |
| **7** | ***Turkey*** | **02** | **01** | ***2*** | ***Boğaziçi University*** | **02** | ***6*** | ***9*** | ***Sri Lanka*** | **03** | **02** | ***1.5*** | ***University of Bradford*** | **02 (66.6)** | **8** |
| **8** | ***China*** | **01** | **01** | ***1*** | ***The Hong Kong Polytechnic University*** | **01** | ***7*** | ***9*** | ***Sweden*** | **03** | **03** | ***1*** | ***University of Auckland, University of Bahçeşehir & University of Ballarat each 1 paper*** | **01+01+01 (Each 33.3)** | **9** |

*Table 4.9* extrapolates the most productive institutions of top ten highly productive countries on the basis of their literature out put to the journal '*SSR*' and '*WSIF*. The study explores that, '*Bowling Green University'* stood 1st ranking institution of USA with (48) papers, following *Norwegian University of Science and Technology of* Norway having (6), *Tel Aviv University* of Israel with (5) and *Tilburg University* of The Netherlands publishing (5) papers got their respective rank 2nd and 3rd rank both later two institutions with equal quantity of publications. Further more, *University of Leuven* of Belgium having (4) and *Statistics Canada* of Canada with (4), both placed 4th rank, *The Danish National Institute of Social Research* of Denmark having (3) got 5th rank, as well as *Malmö University* of Sweden publishing (2) and *Boğaziçi University* of Turkey adding (2) papers

both pose 6th rank, while *The Hong Kong Polytechnic University* of China with 1 paper stood 7th productive institution as enunciated the above table.

Discussing about the most productive institutions of 2nd journal '*WSIF* the table speaks out that, York *Universit*, *University of Melbourne*, *Loughborough University* and *Universiti Kebangsaan* institutions of countries Australia, Canada, USA and UK publishing 36, 35, 31 and 17 papers posed the rank 1st, 2nd, 3rd, and 4th respectively. Additionally, the table also prostrates the rank of remaining 6 institutions of countries *Malaysia (University of California*, 8*), Ireland (University of Kelaniya,* 3), *Sri Lanka (University of Bradford,* 2) *and Sweden (University of Auckland, University of Bahçeşehir and University of Ballarat with* (each 1 paper) and as such placed as 5th , 7th, 8th, 9th position, while *University of Bradford* of New Zealand *with* (6), *University of Massachusetts* of Fiji having (6) papers respectively and as such both placed at 6th position.

In a comparative vision of the institutional representation of both journals, *Bowling Green University* acquired 1st rank in 1st journal, whereas *York University* stood the dominant rank in 2nd journal belonging to different countries such as: USA and Australia. This proves that, no one geographical region is holding uniformity in literature production and research in both journals.

Taking every data into account we may generalize here that, the institutions are not necessarily occupying the same rank as their respective countries hold, because the institutions of lower rank may belong to high ranking countries or vise versa basing on the number of institutions involved and number of papers produced by them as the study unmasks.

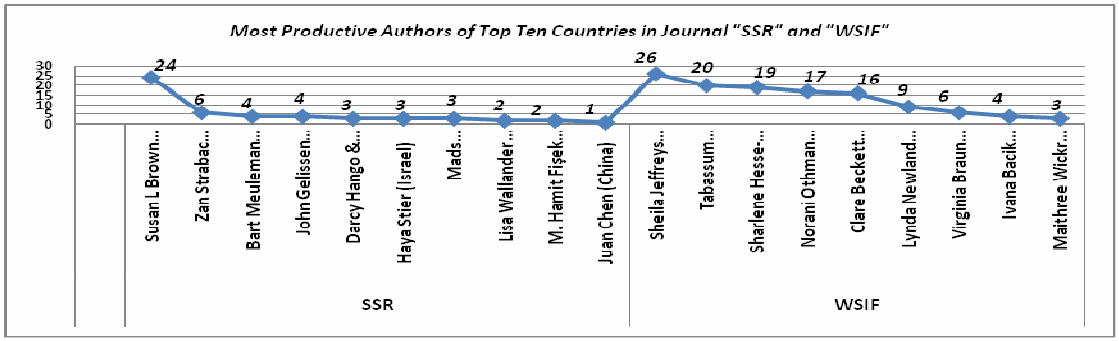
*Always it has been felt appropriate in a bibliometric study to acknowledge and appreciate the most prolific authors with regard to their research out put to a particular field of study or to a particular journal has unmasked clearly in table 4.10.*

**Table-4.10: Top 10 Most Productive Authors**

| **1. Social Science Research (SSR)** | | | | | **2. Women's Studies International Forum (WSIF)** | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ***Rank*** | **Most Productive Author** | **No. of Papers** | **Affiliation to Organization** | **Country of Origin** | ***Rank*** | **Most Productive Author** | **No. of Papers** | **Affiliation to Organization** | **Country of Origin** |
| ***1*** | ***Susan L Brown*** | **24** | **Bowling Green University** | ***USA*** | ***1*** | ***Sheila Jeffreys*** | **26** | **The University of Melbourne** | **Australia** |
| ***2*** | ***Zan Strabac*** | **06** | **Norwegian University of Science and Technology** | **Norway** | ***2*** | ***Tabassum F. Ruby*** | **20** | **York University** | **Canada** |
| ***3*** | ***Bart Meulemman*** | **04** | **University of Leuven** | **Belgium** | ***3*** | ***Sharlene Hesse-Biber & Victoria Clarke*** | **19 each** | **Boston College & Loughborough** | **USA** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | University | |
| *3* | ***John Gelissen*** | **04** | **Tilburg University** | **The Netherlands** | *4* | ***Norani Othman*** | **17** | **Universiti Kebangsaan** | **Malaysia** |
| *4* | ***Darcy Hango & Martha Foschi*** | **Adding 3 from each** | **Statistics Canada & University of British Columbia (2) Institutions** | **Canada** | *5* | ***Clare Beckett*** | **16** | **University of Bradford** | **UK** |
| *4* | ***Haya Stier*** | **03** | **Tel Aviv University** | **Israel** | *6* | ***Lynda Newland*** | **09** | **University of the South Pacific** | **Fiji** |
| *4* | ***Mads Meier Jæger*** | **03** | **The Danish National Institute of Social Research** | **Denmark** | *7* | ***Virginia Braun*** | **06** | **The University of Auckland** | **New Zealand** |
| *5* | ***Lisa Wallander*** | **02** | **Malmö University** | **Sweden** | *8* | ***Ivana Bacik*** | **04** | **Trinity College** | **Ireland** |
| *5* | ***M. Hamit Fişek*** | **02** | **Boğaziçi University** | **Turkey** | *9* | ***Maithree Wickramasinghe*** | **03** | **University of Kelaniya** | **Sri Lanka** |
| *6* | ***Juan Chen*** | **01** | **The Hong Kong Polytechnic University** | **China** | *10* | ***Katarina Leppänen, Helle Rydstrøm, & Maria Jansson*** | **1 each** | **Göteborg University, Linköping University, & Stockholm University** | **Sweden** |

**Figure-5: Most Productive Authors of Top Ten Countries in Both Journals**




Author ranking is a vital feature of any Bibliometric study. The present study, however, is being stressed and analyzed by the researcher in order to recognize and encourage the researchers/authors a more research as embodied in the *table 4.10*. It has been seen that, in both the journals there is no uniformity between country rank and respective author rank, except the most productive author *Susan L Brown* of USA with papers (24) in 1st journal *and Sheila Jeffreys* of

Australia (26) papers in 2nd journal. Moreover, *Zan Strabac* of Norway at 2nd rank publishing (6) papers, *Bart Meuleman* of Belgium, *John Gelissen* of The Netherlands both at 3rd rank equally contributing (4) papers each and *Darcy Hango & Martha Foschi* of *Canada, Haya Stier* of Israel and *Mads Meier Jæger* of Denmark honored with 4th rank publishing (3) papers each respectively in *1st journal*, whereas in *2nd journal Tabassum F. Ruby* of Canada (20), *Sharlene Hesse-Biber and Victoria Clarke* of USA each (19), *Norani Othman* from *Malaysia* (17) *and Clare Beckett* from *UK* (16) posed ranks 2nd , 3rd , 4th and 5th as asserts the above table.

*Classification of publications under different time zones of Top Ten countries is quite significant to identify the most productive time period for the participated geographical regions has portrayed noticeably in table 4.11.*

**Table-4.11: Most Productive Period**

| 1. Social Science Research (SSR) | | | | | 2. Women's Studies International Forum (WSIF) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Rank | Country | Year-Wise Distribution of Publication | | Total | Rank | Country | Year-Wise Distribution of Publication | | | Total |
| | | 2002-2006 | 2007-2011 | | | | Up to 2000 | 2001-2005 | 2006-2010 | |
| 1 | ***USA*** | 174 (40) | 260 (60) | 434 | *1* | ***Australia*** | 0 | 50 | 89 (64) | 139 |
| 2 | ***Canada*** | 0 | 08 (100) | 08 | *2* | ***UK*** | 26 | 46 | 61 (46) | 133 |
| 2 | ***The Netherlands*** | 04 (50) | 04 (50) | 08 | *3* | ***USA*** | 01 | 65 (64) | 36 | 102 |
| 3 | ***Norway*** | 0 | 06 (100) | 06 | *4* | ***Canada*** | 01 | 22 | 36 (61) | 59 |
| 4 | ***Israel*** | 0 | 05 (100) | 05 | *5* | ***Malaysia*** | 0 | 0 | 17 (100) | 17 |
| 5 | ***Belgium*** | 0 | 04 (100) | 04 | *6* | ***New Zealand*** | 01 | 06 (46) | 06 (46) | 13 |
| 6 | ***Denmark*** | 0 | 03 (100) | 03 | *7* | ***Fiji*** | 0 | 0 | 09 (100) | 09 |
| 6 | ***Sweden*** | 0 | 03 (100) | 03 | *8* | ***Ireland*** | 0 | 01 | 04 (80) | 05 |
| 7 | ***Turkey*** | 0 | 02 (100) | 02 | *9* | ***Sri Lanka*** | 0 | 0 | 03 (100) | 03 |
| 8 | ***China*** | 0 | 01 (100) | 01 | *9* | ***Sweden*** | 0 | 01 | 02 (67) | 03 |
| Others | | 25 (96) | 01 | 26 | Others | | 03 | 04 | 10 (59) | 17 |
| ***Grand Total*** | | 203 | 297 (59) | 500 | ***Grand Total*** | | 32 | 195 | 273 (55) | 500 |

On the basis of chronological zones, the production of literature of top 10 geographical regions is classified. The 1st journal carries 2 and 2nd journal has 3 productive zones. In both journals, there is a significant growing trend seen at every later zone from the earlier zones and in 1st journal 2nd zone is proved proficient, while in 2nd journal 3rd zone is found dominant producing

highest number of papers than earlier zones which sharply signifies that, research and development is ever expanding and research out put is moving up ward at a rapid pace.

## 5. Major Findings

a. Measuring the degree of collaboration of research papers published in journals '*SSR*' and '*WSIF*', the table 1 confesses two way authorship patterns of papers in both journals. As far as the 1st journal is concerned, research is a solo process which contradicts to the results such as: research is a joint venture of researchers/scholars as determines the 2nd journal.

b. USA leads among 11participative countries in 1st journal with 86.8 percent papers, while Australia stands forward in 2nd journal among 20 countries with 27.8 per cent papers adding to their accounts respectively.

c. USA is the only country to get the place of pride accounting highest number of papers i. e. 91 (20.96%) in 1st journal and 42 (41.17%) in 2nd journal under the rank 1-5 which are called high ranking papers.

d. Applying Lotka's inverse Square Law of Scientific Productivity with the value of α=2, authors productivity of both journals were measured and resultantly found that, due to a large variation between the observed inverse proportion of contributors and their relative out put, with expected inverse frequency of contributors and their relative out put as figured under table 2.

e. Growth pattern of literature productivity across several time zones of both journals determines a progressive change which may be easily understandable looking after the 2nd zone productivity of 297 (59.4%) of 1st journal and 3rd zone out put of 273 (54.6%) of 2nd journal are much higher than the productivity of relative earlier zones. Besides, it is also resolved that, optimum growth in literature productivity has been seen during the period 2007-2011, 46.30%; and 2001-2005, 509.37% in 1st and 2nd journal respectively.

f. Focusing over the average factors of both journal publications it is clearly ascertained that, the 1st journal is found more proficient with highest value in certain factors such as: average citations per paper 13.148, average authors per paper 2.38, average papers per country 45.45, and average length of papers is 20.248.Nevertheless on the other hand 2nd journal is also prolific in factors with the highest value in average papers per author considering 1st and all authors) i. e. 4.58 and 0.74 respectively.

g. A highest 52.4 and 59 per cent paper of both the journals are cited 1-10 times, followed by 23.8 and 24 per cent papers are cited 11-20 times which collectively constitute 3/4th of the whole publication undertaken for the present study, while the remaining 1/4th papers are cited 21-100 times respectively.

h. The papers with 11-20 pages are found common trend in both journals under which pattern, the highest number of 291 (58.2%) papers of 1st journal and 395 (79%) of 2nd journal are recorded and justified that, usually 11-20 pagination pattern is found more preferable and suitable, because a meager number of papers follow the pagination pattern other than 11-20 which may not be considered as a recognized trend, the study asserts.

i. *'Bowling Green University'* is considered to be one of the most notable institutions of USA which produced highest number of papers 48 with journal '*SSR*', where as '*York University'* of Australia ensured as a leading institution with (36) papers published in 2nd journal '*WSIF*' is determined as the most significant.

j. Table 10 clearly expressed that, the author ranking pattern on the basis of their extent of productivity in respective journals and clearly discloses that, *Susan L Brown* of USA is a prolific author with highest (24) papers in 1st journal, followed by *Sheila Jeffreys* of Australia ensured as the most productive author with (26) papers produced in the 2nd journal respectively.

k. The productive time periods for participative countries is figured in table 11 exposes that, during the period 2007-2011, USA produced highest number of papers (60%) in 1st journal and Australia produced 64% papers during 2006-2010 in 2nd journal respectively. In addition it is also noticed that, both time zones 2007-2011 and 2006-2010 of the said two journals are considerably found most productive time zones for all productive countries which collectively enlists the largest number of papers compared to other relative time zones.

## 6. Conclusion

The present study is intensively devised to measure the research out put in the faculty of Social Sciences (Sociology) undertaking 1000 published literature from the period 2006-2010 of two important international journals such as: Social Science Research (*SSR*) and Women's Studies International Forum (*WSIF*). The data assimilated for this piece of research denotes that, USA and Australia lead in both journals with highest number of papers (434 and 139) among all the participative countries, although a significant growing trend in research productivity has been seen in almost all productive countries at large. Hence, a presumption of promising Social Science research in future across the globe may cut a niche in the church of research and development by the march of time.

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